



Les grands sabots à ailes extérieures sont préconisés pour assembler une structure efficacement sans usinage à façon et ainsi fiabiliser l'ouvrage. Ils sont conçus pour être totalement compatibles avec les ancrages Simpson Strong-Tie et donc faciliter la fixation sur support béton.



[ETA-06/0270](#), [FR-DoP-e06/0270](#)

## CARACTÉRISTIQUES



### Matière

- Acier galvanisé S250GD + Z275 suivant NF EN 10346,
- Epaisseur : 2,5 mm.

### Avantages

- Installation rapide et simple,
- Permet une grande polyvalence,
- Facilite la fixation sur support béton,
- Largeurs au choix selon les plages indiquées.

## APPLICATIONS

### Support

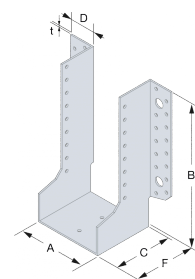
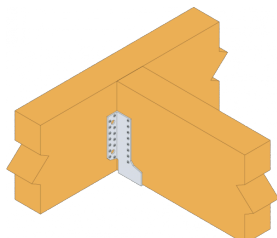
- **Porteur** : bois massif, bois composite, bois lamellé-collé, acier, béton,
- **Porté** : bois massif, bois composite, bois lamellé-collé, fermes triangulées, profilés.

### Domaines d'utilisation

- Solives,
- Pannes,
- Lisses et montants de bardage,
- Butées de chevron,
- Renforcement d'assemblages existants, ...

## DONNÉES TECHNIQUES

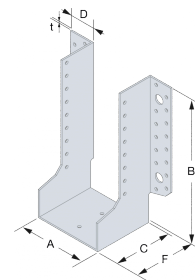
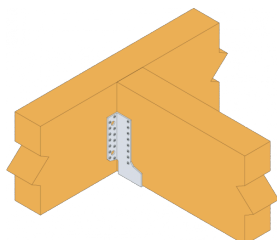
## Développés et largeurs



| Références      | Développé [mm] | A       | B          | C  |
|-----------------|----------------|---------|------------|----|
| GLE380/2.5X     | 380            | 32-110  | (380-A)/2  | 90 |
| GLE440/2.5X     | 440            | 32-160  | (440-A)/2  | 90 |
| GLE500/2.5X     | 500            | 32-160  | (500-A)/2  | 90 |
| GLE500/2.5X-AL  |                | 161-240 | (500-A)/2  | 90 |
| GLE540/2.5X     | 540            | 32-160  | (540-A)/2  | 90 |
| GLE540/2.5X-AL  |                | 161-240 | (540-A)/2  | 90 |
| GLE600/2.5X     | 600            | 32-160  | (600-A)/2  | 90 |
| GLE600/2.5X-AL  |                | 161-240 | (600-A)/2  | 90 |
| GLE660/2.5X     | 660            | 32-160  | (660-A)/2  | 90 |
| GLE660/2.5X-AL  |                | 161-240 | (660-A)/2  | 90 |
| GLE720/2.5X     | 720            | 32-160  | (720-A)/2  | 90 |
| GLE720/2.5X-AL  |                | 161-240 | (720-A)/2  | 90 |
| GLE780/2.5X     | 780            | 32-160  | (780-A)/2  | 90 |
| GLE780/2.5X-AL  |                | 161-240 | (780-A)/2  | 90 |
| GLE840/2.5X     | 840            | 32-160  | (840-A)/2  | 90 |
| GLE840/2.5X-AL  |                | 161-240 | (840-A)/2  | 90 |
| GLE900/2.5X     | 900            | 32-160  | (900-A)/2  | 90 |
| GLE900/2.5X-AL  |                | 161-240 | (900-A)/2  | 90 |
| GLE960/2.5X     | 960            | 32-160  | (960-A)/2  | 90 |
| GLE960/2.5X-AL  |                | 161-240 | (960-A)/2  | 90 |
| GLE1020/2.5X    | 1020           | 32-160  | (1020-A)/2 | 90 |
| GLE1020/2.5X-AL |                | 161-240 | (1020-A)/2 | 90 |

Pour plus d'informations sur les valeurs de charge en fonction de la largeur du sabot, contacter le service technique.

## Dimensions

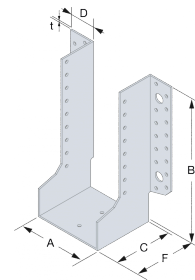
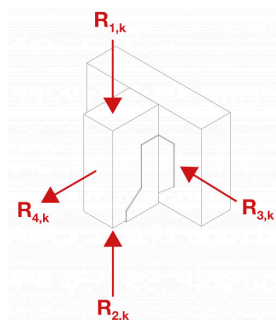
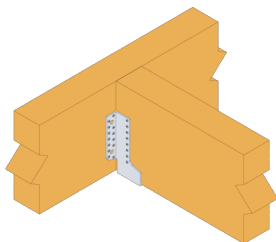


| Références      | Dimensions poutre [mm] |      |         |      | Dimensions [mm] |     |    |      |    |     | Perçages sur porteur |     | Perçages sur porté |
|-----------------|------------------------|------|---------|------|-----------------|-----|----|------|----|-----|----------------------|-----|--------------------|
|                 | Largeur                |      | Hauteur |      | A               | B   | C  | D    | F  | t   | Ø5                   | Ø13 | Ø5                 |
|                 | Min.                   | Max. | Min.    | Max. |                 |     |    |      |    |     |                      |     |                    |
| GLE440/38/2,5   | 36                     | 38   | 211     | 301  | 38              | 201 | 90 | 38.5 | 95 | 2.5 | 20                   | 4   | 12                 |
| GLE500/50/2,5   | 48                     | 50   | 235     | 337  | 50              | 225 | 90 | 38.5 | 95 | 2.5 | 26                   | 4   | 15                 |
| GLE380/64/2,5   | 62                     | 64   | 168     | 237  | 64              | 158 | 90 | 38.5 | 95 | 2.5 | 20                   | 2   | 11                 |
| GLE380/70/2,5   | 68                     | 70   | 165     | 232  | 70              | 155 | 90 | 38.5 | 95 | 2.5 | 20                   | 2   | 11                 |
| GLE440/70/2,5   | 68                     | 70   | 195     | 277  | 70              | 185 | 90 | 38.5 | 95 | 2.5 | 20                   | 4   | 12                 |
| GLE500/70/2,5   | 68                     | 70   | 225     | 322  | 70              | 215 | 90 | 38.5 | 95 | 2.5 | 26                   | 4   | 15                 |
| GLE380/76/2,5   | 74                     | 76   | 162     | 228  | 76              | 152 | 90 | 38.5 | 95 | 2.5 | 20                   | 2   | 11                 |
| GLE440/76/2,5   | 74                     | 76   | 192     | 273  | 76              | 182 | 90 | 38.5 | 95 | 2.5 | 20                   | 4   | 12                 |
| GLE500/76/2,5   | 74                     | 76   | 222     | 318  | 76              | 212 | 90 | 38.5 | 95 | 2.5 | 26                   | 4   | 15                 |
| GLE380/80/2,5   | 78                     | 80   | 160     | 225  | 80              | 150 | 90 | 38.5 | 95 | 2.5 | 20                   | 2   | 11                 |
| GLE440/80/2,5   | 78                     | 80   | 190     | 270  | 80              | 180 | 90 | 38.5 | 95 | 2.5 | 20                   | 4   | 12                 |
| GLE500/80/2,5   | 78                     | 80   | 220     | 315  | 80              | 210 | 90 | 38.5 | 95 | 2.5 | 26                   | 4   | 15                 |
| GLE540/80/2,5   | 78                     | 80   | 240     | 345  | 80              | 230 | 90 | 38.5 | 95 | 2.5 | 30                   | 4   | 17                 |
| GLE600/80/2,5   | 78                     | 80   | 270     | 390  | 80              | 260 | 90 | 38.5 | 95 | 2.5 | 36                   | 4   | 20                 |
| GLE660/80/2,5   | 78                     | 80   | 300     | 435  | 80              | 290 | 90 | 38.5 | 95 | 2.5 | 40                   | 6   | 23                 |
| GLE720/80/2,5   | 78                     | 80   | 330     | 480  | 80              | 320 | 90 | 38.5 | 95 | 2.5 | 46                   | 6   | 26                 |
| GLE780/80/2,5   | 78                     | 80   | 360     | 525  | 80              | 350 | 90 | 38.5 | 95 | 2.5 | 48                   | 6   | 29                 |
| GLE840/80/2,5   | 78                     | 80   | 390     | 570  | 80              | 380 | 90 | 38.5 | 95 | 2.5 | 54                   | 6   | 32                 |
| GLE900/80/2,5   | 78                     | 80   | 420     | 615  | 80              | 410 | 90 | 38.5 | 95 | 2.5 | 60                   | 6   | 35                 |
| GLE960/80/2,5   | 78                     | 80   | 450     | 660  | 80              | 440 | 90 | 38.5 | 95 | 2.5 | 64                   | 8   | 38                 |
| GLE1020/80/2,5  | 78                     | 80   | 480     | 705  | 80              | 470 | 90 | 38.5 | 95 | 2.5 | 70                   | 8   | 41                 |
| GLE380/90/2,5   | 88                     | 90   | 155     | 217  | 90              | 145 | 90 | 38.5 | 95 | 2.5 | 20                   | 2   | 11                 |
| GLE440/90/2,5   | 88                     | 90   | 185     | 262  | 90              | 175 | 90 | 38.5 | 95 | 2.5 | 20                   | 4   | 12                 |
| GLE500/90/2,5   | 88                     | 90   | 215     | 307  | 90              | 205 | 90 | 38.5 | 95 | 2.5 | 26                   | 4   | 15                 |
| GLE540/90/2,5   | 88                     | 90   | 235     | 337  | 90              | 225 | 90 | 38.5 | 95 | 2.5 | 30                   | 4   | 17                 |
| GLE600/90/2,5   | 88                     | 90   | 265     | 382  | 90              | 255 | 90 | 38.5 | 95 | 2.5 | 36                   | 4   | 20                 |
| GLE660/90/2,5   | 88                     | 90   | 295     | 427  | 90              | 285 | 90 | 38.5 | 95 | 2.5 | 40                   | 6   | 23                 |
| GLE720/90/2,5   | 88                     | 90   | 325     | 472  | 90              | 315 | 90 | 38.5 | 95 | 2.5 | 46                   | 6   | 26                 |
| GLE780/90/2,5   | 88                     | 90   | 355     | 517  | 90              | 345 | 90 | 38.5 | 95 | 2.5 | 48                   | 6   | 29                 |
| GLE840/90/2,5   | 88                     | 90   | 385     | 562  | 90              | 375 | 90 | 38.5 | 95 | 2.5 | 54                   | 6   | 32                 |
| GLE900/90/2,5   | 88                     | 90   | 415     | 607  | 90              | 405 | 90 | 38.5 | 95 | 2.5 | 60                   | 6   | 35                 |
| GLE960/90/2,5   | 88                     | 90   | 445     | 652  | 90              | 435 | 90 | 38.5 | 95 | 2.5 | 64                   | 8   | 38                 |
| GLE1020/90/2,5  | 88                     | 90   | 475     | 697  | 90              | 465 | 90 | 38.5 | 95 | 2.5 | 70                   | 8   | 41                 |
| GLE380/100/2,5  | 98                     | 100  | 150     | 210  | 100             | 140 | 90 | 38.5 | 95 | 2.5 | 20                   | 2   | 11                 |
| GLE440/100/2,5  | 98                     | 100  | 180     | 255  | 100             | 170 | 90 | 38.5 | 95 | 2.5 | 20                   | 4   | 12                 |
| GLE500/100/2,5  | 98                     | 100  | 210     | 300  | 100             | 200 | 90 | 38.5 | 95 | 2.5 | 26                   | 4   | 15                 |
| GLE540/100/2,5  | 98                     | 100  | 230     | 330  | 100             | 220 | 90 | 38.5 | 95 | 2.5 | 30                   | 4   | 17                 |
| GLE600/100/2,5  | 98                     | 100  | 260     | 375  | 100             | 250 | 90 | 38.5 | 95 | 2.5 | 36                   | 4   | 20                 |
| GLE660/100/2,5  | 98                     | 100  | 290     | 420  | 100             | 280 | 90 | 38.5 | 95 | 2.5 | 40                   | 6   | 23                 |
| GLE720/100/2,5  | 98                     | 100  | 320     | 465  | 100             | 310 | 90 | 38.5 | 95 | 2.5 | 46                   | 6   | 26                 |
| GLE780/100/2,5  | 98                     | 100  | 350     | 510  | 100             | 340 | 90 | 38.5 | 95 | 2.5 | 48                   | 6   | 29                 |
| GLE840/100/2,5  | 98                     | 100  | 380     | 555  | 100             | 370 | 90 | 38.5 | 95 | 2.5 | 54                   | 6   | 32                 |
| GLE900/100/2,5  | 98                     | 100  | 410     | 600  | 100             | 400 | 90 | 38.5 | 95 | 2.5 | 60                   | 6   | 35                 |
| GLE960/100/2,5  | 98                     | 100  | 440     | 645  | 100             | 430 | 90 | 38.5 | 95 | 2.5 | 64                   | 8   | 38                 |
| GLE1020/100/2,5 | 98                     | 100  | 470     | 690  | 100             | 460 | 90 | 38.5 | 95 | 2.5 | 70                   | 8   | 41                 |
| GLE500/120/2,5  | 118                    | 120  | 200     | 285  | 120             | 190 | 90 | 38.5 | 95 | 2.5 | 26                   | 4   | 15                 |
| GLE540/120/2,5  | 118                    | 120  | 220     | 315  | 120             | 210 | 90 | 38.5 | 95 | 2.5 | 30                   | 4   | 17                 |
| GLE600/120/2,5  | 118                    | 120  | 250     | 360  | 120             | 240 | 90 | 38.5 | 95 | 2.5 | 36                   | 4   | 20                 |
| GLE660/120/2,5  | 118                    | 120  | 280     | 405  | 120             | 270 | 90 | 38.5 | 95 | 2.5 | 40                   | 6   | 23                 |
| GLE720/120/2,5  | 118                    | 120  | 310     | 450  | 120             | 300 | 90 | 38.5 | 95 | 2.5 | 46                   | 6   | 26                 |
| GLE780/120/2,5  | 118                    | 120  | 340     | 495  | 120             | 330 | 90 | 38.5 | 95 | 2.5 | 48                   | 6   | 29                 |
| GLE840/120/2,5  | 118                    | 120  | 370     | 540  | 120             | 360 | 90 | 38.5 | 95 | 2.5 | 54                   | 6   | 32                 |
| GLE900/120/2,5  | 118                    | 120  | 400     | 585  | 120             | 390 | 90 | 38.5 | 95 | 2.5 | 60                   | 6   | 35                 |
| GLE960/120/2,5  | 118                    | 120  | 430     | 630  | 120             | 420 | 90 | 38.5 | 95 | 2.5 | 64                   | 8   | 38                 |
| GLE1020/120/2,5 | 118                    | 120  | 460     | 675  | 120             | 450 | 90 | 38.5 | 95 | 2.5 | 70                   | 8   | 41                 |
| GLE500/140/2,5  | 138                    | 140  | 190     | 270  | 140             | 180 | 90 | 38.5 | 95 | 2.5 | 26                   | 4   | 15                 |

| Références      | Dimensions poutre [mm] |      |         |      | Dimensions [mm] |     |    |      |    |     | Perçages sur porteur |     | Perçages sur porté |
|-----------------|------------------------|------|---------|------|-----------------|-----|----|------|----|-----|----------------------|-----|--------------------|
|                 | Largeur                |      | Hauteur |      | A               | B   | C  | D    | F  | t   | Ø5                   | Ø13 | Ø5                 |
|                 | Min.                   | Max. | Min.    | Max. |                 |     |    |      |    |     |                      |     |                    |
| GLE540/140/2,5  | 138                    | 140  | 210     | 300  | 140             | 200 | 90 | 38.5 | 95 | 2.5 | 30                   | 4   | 17                 |
| GLE600/140/2,5  | 138                    | 140  | 240     | 345  | 140             | 230 | 90 | 38.5 | 95 | 2.5 | 36                   | 4   | 20                 |
| GLE660/140/2,5  | 138                    | 140  | 270     | 390  | 140             | 260 | 90 | 38.5 | 95 | 2.5 | 40                   | 6   | 23                 |
| GLE720/140/2,5  | 138                    | 140  | 300     | 435  | 140             | 290 | 90 | 38.5 | 95 | 2.5 | 46                   | 6   | 26                 |
| GLE780/140/2,5  | 138                    | 140  | 330     | 480  | 140             | 320 | 90 | 38.5 | 95 | 2.5 | 48                   | 6   | 29                 |
| GLE840/140/2,5  | 138                    | 140  | 360     | 525  | 140             | 350 | 90 | 38.5 | 95 | 2.5 | 54                   | 6   | 32                 |
| GLE900/140/2,5  | 138                    | 140  | 390     | 570  | 140             | 380 | 90 | 38.5 | 95 | 2.5 | 60                   | 6   | 35                 |
| GLE960/140/2,5  | 138                    | 140  | 420     | 615  | 140             | 410 | 90 | 38.5 | 95 | 2.5 | 64                   | 8   | 38                 |
| GLE1020/140/2,5 | 138                    | 140  | 450     | 660  | 140             | 440 | 90 | 38.5 | 95 | 2.5 | 70                   | 8   | 41                 |
| GLE500/160/2,5  | 158                    | 160  | 180     | 255  | 160             | 170 | 90 | 38.5 | 95 | 2.5 | 26                   | 4   | 15                 |
| GLE540/160/2,5  | 158                    | 160  | 200     | 285  | 160             | 190 | 90 | 38.5 | 95 | 2.5 | 30                   | 4   | 17                 |
| GLE600/160/2,5  | 158                    | 160  | 230     | 330  | 160             | 220 | 90 | 38.5 | 95 | 2.5 | 36                   | 4   | 20                 |
| GLE660/160/2,5  | 158                    | 160  | 260     | 375  | 160             | 250 | 90 | 38.5 | 95 | 2.5 | 40                   | 6   | 23                 |
| GLE720/160/2,5  | 158                    | 160  | 290     | 420  | 160             | 280 | 90 | 38.5 | 95 | 2.5 | 46                   | 6   | 26                 |
| GLE780/160/2,5  | 158                    | 160  | 320     | 465  | 160             | 310 | 90 | 38.5 | 95 | 2.5 | 48                   | 6   | 29                 |
| GLE840/160/2,5  | 158                    | 160  | 350     | 510  | 160             | 340 | 90 | 38.5 | 95 | 2.5 | 54                   | 6   | 32                 |
| GLE900/160/2,5  | 158                    | 160  | 380     | 555  | 160             | 370 | 90 | 38.5 | 95 | 2.5 | 60                   | 6   | 35                 |
| GLE960/160/2,5  | 158                    | 160  | 410     | 600  | 160             | 400 | 90 | 38.5 | 95 | 2.5 | 64                   | 8   | 38                 |
| GLE1020/160/2,5 | 158                    | 160  | 440     | 645  | 160             | 430 | 90 | 38.5 | 95 | 2.5 | 70                   | 8   | 41                 |
| GLE500/180/2,5  | 178                    | 180  | 170     | 240  | 180             | 160 | 90 | 38.5 | 95 | 2.5 | 18                   | 4   | 13                 |
| GLE540/180/2,5  | 178                    | 180  | 190     | 270  | 180             | 180 | 90 | 38.5 | 95 | 2.5 | 18                   | 4   | 13                 |
| GLE600/180/2,5  | 178                    | 180  | 220     | 315  | 180             | 210 | 90 | 38.5 | 95 | 2.5 | 24                   | 4   | 16                 |
| GLE660/180/2,5  | 178                    | 180  | 250     | 360  | 180             | 240 | 90 | 38.5 | 95 | 2.5 | 28                   | 6   | 19                 |
| GLE720/180/2,5  | 178                    | 180  | 280     | 405  | 180             | 270 | 90 | 38.5 | 95 | 2.5 | 34                   | 6   | 22                 |
| GLE780/180/2,5  | 178                    | 180  | 310     | 450  | 180             | 300 | 90 | 38.5 | 95 | 2.5 | 40                   | 6   | 25                 |
| GLE840/180/2,5  | 178                    | 180  | 340     | 495  | 180             | 330 | 90 | 38.5 | 95 | 2.5 | 46                   | 6   | 28                 |
| GLE900/180/2,5  | 178                    | 180  | 370     | 540  | 180             | 360 | 90 | 38.5 | 95 | 2.5 | 52                   | 6   | 31                 |
| GLE960/180/2,5  | 178                    | 180  | 400     | 585  | 180             | 390 | 90 | 38.5 | 95 | 2.5 | 58                   | 6   | 34                 |
| GLE1020/180/2,5 | 178                    | 180  | 430     | 630  | 180             | 420 | 90 | 38.5 | 95 | 2.5 | 62                   | 8   | 37                 |
| GLE500/200/2,5  | 198                    | 200  | 160     | 225  | 200             | 150 | 90 | 38.5 | 95 | 2.5 | 18                   | 4   | 13                 |
| GLE540/200/2,5  | 198                    | 200  | 180     | 255  | 200             | 170 | 90 | 38.5 | 95 | 2.5 | 18                   | 4   | 13                 |
| GLE600/200/2,5  | 198                    | 200  | 210     | 300  | 200             | 200 | 90 | 38.5 | 95 | 2.5 | 24                   | 4   | 16                 |
| GLE660/200/2,5  | 198                    | 200  | 240     | 345  | 200             | 230 | 90 | 38.5 | 95 | 2.5 | 28                   | 6   | 19                 |
| GLE720/200/2,5  | 198                    | 200  | 270     | 390  | 200             | 260 | 90 | 38.5 | 95 | 2.5 | 34                   | 6   | 22                 |
| GLE780/200/2,5  | 198                    | 200  | 300     | 435  | 200             | 290 | 90 | 38.5 | 95 | 2.5 | 40                   | 6   | 25                 |
| GLE840/200/2,5  | 198                    | 200  | 330     | 480  | 200             | 320 | 90 | 38.5 | 95 | 2.5 | 46                   | 6   | 28                 |
| GLE900/200/2,5  | 198                    | 200  | 360     | 525  | 200             | 350 | 90 | 38.5 | 95 | 2.5 | 52                   | 6   | 31                 |
| GLE960/200/2,5  | 198                    | 200  | 390     | 570  | 200             | 380 | 90 | 38.5 | 95 | 2.5 | 58                   | 6   | 34                 |
| GLE1020/200/2,5 | 198                    | 200  | 420     | 615  | 200             | 410 | 90 | 38.5 | 95 | 2.5 | 62                   | 8   | 37                 |
| GLE540/220/2,5  | 218                    | 220  | 170     | 240  | 220             | 160 | 90 | 38.5 | 95 | 2.5 | 18                   | 4   | 13                 |
| GLE600/220/2,5  | 218                    | 220  | 200     | 285  | 220             | 190 | 90 | 38.5 | 95 | 2.5 | 24                   | 4   | 16                 |
| GLE660/220/2,5  | 218                    | 220  | 230     | 330  | 220             | 220 | 90 | 38.5 | 95 | 2.5 | 28                   | 6   | 19                 |
| GLE720/220/2,5  | 218                    | 220  | 260     | 375  | 220             | 250 | 90 | 38.5 | 95 | 2.5 | 34                   | 6   | 22                 |
| GLE780/220/2,5  | 218                    | 220  | 290     | 420  | 220             | 280 | 90 | 38.5 | 95 | 2.5 | 40                   | 6   | 25                 |
| GLE840/220/2,5  | 218                    | 220  | 320     | 465  | 220             | 310 | 90 | 38.5 | 95 | 2.5 | 46                   | 6   | 28                 |
| GLE900/220/2,5  | 218                    | 220  | 350     | 510  | 220             | 340 | 90 | 38.5 | 95 | 2.5 | 52                   | 6   | 31                 |
| GLE960/220/2,5  | 218                    | 220  | 380     | 555  | 220             | 370 | 90 | 38.5 | 95 | 2.5 | 58                   | 6   | 34                 |
| GLE1020/220/2,5 | 218                    | 220  | 410     | 600  | 220             | 400 | 90 | 38.5 | 95 | 2.5 | 62                   | 8   | 37                 |
| GLE540/240/2,5  | 238                    | 240  | 160     | 225  | 240             | 150 | 90 | 38.5 | 95 | 2.5 | 18                   | 4   | 13                 |
| GLE600/240/2,5  | 238                    | 240  | 190     | 270  | 240             | 180 | 90 | 38.5 | 95 | 2.5 | 24                   | 4   | 16                 |
| GLE660/240/2,5  | 238                    | 240  | 220     | 315  | 240             | 210 | 90 | 38.5 | 95 | 2.5 | 28                   | 6   | 19                 |
| GLE720/240/2,5  | 238                    | 240  | 250     | 360  | 240             | 240 | 90 | 38.5 | 95 | 2.5 | 34                   | 6   | 22                 |
| GLE780/240/2,5  | 238                    | 240  | 280     | 405  | 240             | 270 | 90 | 38.5 | 95 | 2.5 | 40                   | 6   | 25                 |
| GLE840/240/2,5  | 238                    | 240  | 310     | 450  | 240             | 300 | 90 | 38.5 | 95 | 2.5 | 46                   | 6   | 28                 |
| GLE900/240/2,5  | 238                    | 240  | 340     | 495  | 240             | 330 | 90 | 38.5 | 95 | 2.5 | 52                   | 6   | 31                 |
| GLE960/240/2,5  | 238                    | 240  | 370     | 540  | 240             | 360 | 90 | 38.5 | 95 | 2.5 | 58                   | 6   | 34                 |

| Références      | Dimensions poutre [mm] |      |         |      | Dimensions [mm] |     |    |      |    |     | Perçages sur porteur |     | Perçages sur porté |
|-----------------|------------------------|------|---------|------|-----------------|-----|----|------|----|-----|----------------------|-----|--------------------|
|                 | Largeur                |      | Hauteur |      | A               | B   | C  | D    | F  | t   | Ø5                   | Ø13 | Ø5                 |
|                 | Min.                   | Max. | Min.    | Max. |                 |     |    |      |    |     |                      |     |                    |
| GLE1020/240/2,5 | 238                    | 240  | 400     | 585  | 240             | 390 | 90 | 38.5 | 95 | 2.5 | 62                   | 8   | 37                 |

## Valeurs Caractéristiques - Bois sur bois - Clouage total



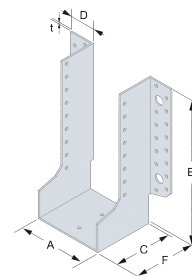
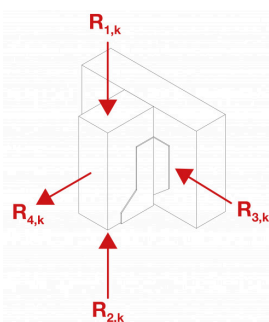
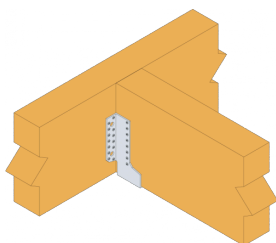
| Références     | Valeurs caractéristiques - Bois sur bois - Clouage total |           |  |           |                  |           |                  |           |                  |      |
|----------------|--|-----------|--|-----------|------------------|-----------|------------------|-----------|------------------|------|
|                | Fixations  |           | Valeurs caractéristiques - Bois C24 [kN] |           |                  |           |                  |           |                  |      |
|                | Porteur  | Porté     | R <sub>1,k</sub>                         |           | R <sub>2,k</sub> |           | R <sub>3,k</sub> |           | R <sub>4,k</sub> |      |
| Qté            | Qté  | CNA4,0x35 | CNA4,0x50                                | CNA4,0x35 | CNA4,0x50        | CNA4,0x35 | CNA4,0x50        | CNA4,0x35 | CNA4,0x50        |      |
| GLE440/38/2,5  | 20   | 12        | 19.6                                     | -         | 12.8             | -         | 2.9              | -         | 4.9              | -    |
| GLE500/50/2,5  | 26   | 15        | 24.5                                     | -         | 18.8             | -         | 3.9              | -         | 7.3              | -    |
| GLE380/64/2,5  | 20   | 11        | -  | 24.1      | -                | 19.8      | -                | 6.1       | -                | 9.8  |
| GLE380/70/2,5  | 20   | 11        | -  | 24.1      | -                | 19.8      | -                | 6.5       | -                | 9.8  |
| GLE440/70/2,5  | 20   | 12        | -  | 26.3      | -                | 19.9      | -                | 6.6       | -                | 7.8  |
| GLE500/70/2,5  | 26   | 15        | -  | 32.9      | -                | 29.1      | -                | 7.3       | -                | 11.8 |
| GLE380/76/2,5  | 20   | 11        | -  | 24.1      | -                | 19.8      | -                | 6.9       | -                | 9.8  |
| GLE440/76/2,5  | 20   | 12        | -  | 26.3      | -                | 19.9      | -                | 7         | -                | 7.8  |
| GLE500/76/2,5  | 26   | 15        | -  | 32.9      | -                | 29.1      | -                | 7.8       | -                | 11.8 |
| GLE380/80/2,5  | 20   | 11        | -  | 24.1      | -                | 19.8      | -                | 7.1       | -                | 9.8  |
| GLE440/80/2,5  | 20   | 12        | -  | 26.3      | -                | 19.9      | -                | 7.3       | -                | 7.8  |
| GLE500/80/2,5  | 26   | 15        | -  | 32.9      | -                | 29.1      | -                | 8.1       | -                | 11.8 |
| GLE540/80/2,5  | 30   | 17        | -  | 37.2      | -                | 33.5      | -                | 8.5       | -                | 13.7 |
| GLE600/80/2,5  | 36   | 20        | -  | 43.8      | -                | 39.4      | -                | 8.9       | -                | 15.7 |
| GLE660/80/2,5  | 40   | 23        | -  | 50.4      | -                | 45.3      | -                | 9.2       | -                | 17.6 |
| GLE720/80/2,5  | 46   | 26        | -  | 56.9      | -                | 51.2      | -                | 9.5       | -                | 19.6 |
| GLE780/80/2,5  | 48   | 29        | -  | 63.5      | -                | 57.2      | -                | 10        | -                | 21.6 |
| GLE840/80/2,5  | 54   | 32        | -  | 70.1      | -                | 63.1      | -                | 10.1      | -                | 23.5 |
| GLE900/80/2,5  | 60   | 35        | -  | 76.7      | -                | 69        | -                | 10.2      | -                | 27.4 |
| GLE960/80/2,5  | 64   | 38        | -  | 83.2      | -                | 74.9      | -                | 10.3      | -                | 27.4 |
| GLE1020/80/2,5 | 70   | 41        | -  | 89.8      | -                | 80.8      | -                | 10.3      | -                | 31.4 |
| GLE380/90/2,5  | 20   | 11        | -  | 24.1      | -                | 19.8      | -                | 7.6       | -                | 9.8  |
| GLE440/90/2,5  | 20   | 12        | -  | 26.3      | -                | 19.9      | -                | 7.9       | -                | 7.8  |
| GLE500/90/2,5  | 26   | 15        | -  | 32.9      | -                | 29.1      | -                | 8.8       | -                | 11.8 |
| GLE540/90/2,5  | 30   | 17        | -  | 37.2      | -                | 33.5      | -                | 9.3       | -                | 13.7 |
| GLE600/90/2,5  | 36   | 20        | -  | 43.8      | -                | 39.4      | -                | 9.8       | -                | 15.7 |
| GLE660/90/2,5  | 40   | 23        | -  | 50.4      | -                | 45.3      | -                | 10.2      | -                | 17.6 |
| GLE720/90/2,5  | 46   | 26        | -  | 56.9      | -                | 51.2      | -                | 10.5      | -                | 19.6 |
| GLE780/90/2,5  | 48   | 29        | -  | 63.5      | -                | 57.2      | -                | 11.1      | -                | 21.6 |
| GLE840/90/2,5  | 54   | 32        | -  | 70.1      | -                | 63.1      | -                | 11.3      | -                | 23.5 |
| GLE900/90/2,5  | 60   | 35        | -  | 76.7      | -                | 69        | -                | 11.4      | -                | 27.4 |
| GLE960/90/2,5  | 64   | 38        | -  | 83.2      | -                | 74.9      | -                | 11.5      | -                | 27.4 |
| GLE1020/90/2,5 | 70   | 41        | -  | 89.8      | -                | 80.8      | -                | 11.6      | -                | 31.4 |
| GLE380/100/2,5 | 20   | 11        | -  | 23        | -                | 19.8      | -                | 8.1       | -                | 9.8  |

| Références      | Valeurs caractéristiques - Bois sur bois - Clouage total |       |  |           |                  |           |                  |           |                  |           |
|-----------------|--|-------|--|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
|                 | Fixations  |       | Valeurs caractéristiques - Bois C24 [kN] |           |                  |           |                  |           |                  |           |
|                 | Porteur  | Porté | R <sub>1,k</sub>                         |           | R <sub>2,k</sub> |           | R <sub>3,k</sub> |           | R <sub>4,k</sub> |           |
|                 | Qté  | Qté   | CNA4,0x35                                | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 |
| GLE440/100/2,5  | 20   | 12    | -  | 26.3      | -                | 19.9      | -                | 8.4       | -                | 7.8       |
| GLE500/100/2,5  | 26   | 15    | -  | 32.9      | -                | 29.1      | -                | 9.5       | -                | 11.8      |
| GLE540/100/2,5  | 30   | 17    | -  | 37.2      | -                | 33.5      | -                | 10        | -                | 13.7      |
| GLE600/100/2,5  | 36   | 20    | -  | 43.8      | -                | 39.4      | -                | 10.7      | -                | 15.7      |
| GLE660/100/2,5  | 40   | 23    | -  | 50.4      | -                | 45.3      | -                | 11.1      | -                | 17.6      |
| GLE720/100/2,5  | 46   | 26    | -  | 56.9      | -                | 51.2      | -                | 11.5      | -                | 19.6      |
| GLE780/100/2,5  | 48   | 29    | -  | 63.5      | -                | 57.2      | -                | 12.2      | -                | 21.6      |
| GLE840/100/2,5  | 54   | 32    | -  | 70.1      | -                | 63.1      | -                | 12.4      | -                | 23.5      |
| GLE900/100/2,5  | 60   | 35    | -  | 76.7      | -                | 69        | -                | 12.6      | -                | 27.4      |
| GLE960/100/2,5  | 64   | 38    | -  | 83.2      | -                | 74.9      | -                | 12.7      | -                | 27.4      |
| GLE1020/100/2,5 | 70   | 41    | -  | 89.8      | -                | 80.8      | -                | 12.8      | -                | 31.4      |
| GLE500/120/2,5  | 26   | 15    | -  | 32.9      | -                | 29.1      | -                | 10.6      | -                | 11.8      |
| GLE540/120/2,5  | 30   | 17    | -  | 37.2      | -                | 33.5      | -                | 11.3      | -                | 13.7      |
| GLE600/120/2,5  | 36   | 20    | -  | 43.8      | -                | 39.4      | -                | 12.2      | -                | 15.7      |
| GLE660/120/2,5  | 40   | 23    | -  | 50.4      | -                | 45.3      | -                | 12.8      | -                | 17.6      |
| GLE720/120/2,5  | 46   | 26    | -  | 56.9      | -                | 51.2      | -                | 13.4      | -                | 19.6      |
| GLE780/120/2,5  | 48   | 29    | -  | 63.5      | -                | 57.2      | -                | 14.3      | -                | 21.6      |
| GLE840/120/2,5  | 54   | 32    | -  | 70.1      | -                | 63.1      | -                | 14.6      | -                | 23.5      |
| GLE900/120/2,5  | 60   | 35    | -  | 76.7      | -                | 69        | -                | 14.8      | -                | 27.4      |
| GLE960/120/2,5  | 64   | 38    | -  | 83.2      | -                | 74.9      | -                | 15        | -                | 27.4      |
| GLE1020/120/2,5 | 70   | 41    | -  | 89.8      | -                | 80.8      | -                | 15.1      | -                | 31.4      |
| GLE500/140/2,5  | 26   | 15    | -  | 32.9      | -                | 29.1      | -                | 11.4      | -                | 11.8      |
| GLE540/140/2,5  | 30   | 17    | -  | 37.2      | -                | 33.5      | -                | 12.3      | -                | 13.7      |
| GLE600/140/2,5  | 36   | 20    | -  | 43.8      | -                | 39.4      | -                | 13.5      | -                | 15.7      |
| GLE660/140/2,5  | 40   | 23    | -  | 50.4      | -                | 45.3      | -                | 14.3      | -                | 17.6      |
| GLE720/140/2,5  | 46   | 26    | -  | 56.9      | -                | 51.2      | -                | 15.1      | -                | 19.6      |
| GLE780/140/2,5  | 48   | 29    | -  | 63.5      | -                | 57.2      | -                | 16.1      | -                | 21.6      |
| GLE840/140/2,5  | 54   | 32    | -  | 70.1      | -                | 63.1      | -                | 16.5      | -                | 23.5      |
| GLE900/140/2,5  | 60   | 35    | -  | 76.7      | -                | 69        | -                | 16.8      | -                | 27.4      |
| GLE960/140/2,5  | 64   | 38    | -  | 83.2      | -                | 74.9      | -                | 17.1      | -                | 27.4      |
| GLE1020/140/2,5 | 70   | 41    | -  | 89.8      | -                | 80.8      | -                | 17.4      | -                | 31.4      |
| GLE500/160/2,5  | 26   | 15    | -  | 32.9      | -                | 29.1      | -                | 12.1      | -                | 11.8      |
| GLE540/160/2,5  | 30   | 17    | -  | 37.2      | -                | 33.5      | -                | 13.2      | -                | 13.7      |
| GLE600/160/2,5  | 36   | 20    | -  | 43.8      | -                | 39.4      | -                | 14.5      | -                | 15.7      |
| GLE660/160/2,5  | 40   | 23    | -  | 50.4      | -                | 45.3      | -                | 15.6      | -                | 17.6      |
| GLE720/160/2,5  | 46   | 26    | -  | 56.9      | -                | 51.2      | -                | 16.5      | -                | 19.6      |
| GLE780/160/2,5  | 48   | 29    | -  | 63.5      | -                | 57.2      | -                | 17.7      | -                | 21.6      |
| GLE840/160/2,5  | 54   | 32    | -  | 70.1      | -                | 63.1      | -                | 18.3      | -                | 23.5      |
| GLE900/160/2,5  | 60   | 35    | -  | 76.7      | -                | 69        | -                | 18.7      | -                | 27.4      |
| GLE960/160/2,5  | 64   | 38    | -  | 83.2      | -                | 74.9      | -                | 19.1      | -                | 27.4      |
| GLE1020/160/2,5 | 70   | 41    | -  | 89.8      | -                | 80.8      | -                | 19.5      | -                | 31.4      |
| GLE500/180/2,5  | 18   | 13    | -  | 26        | -                | 16.9      | -                | 11.4      | -                | 7.8       |
| GLE540/180/2,5  | 18   | 13    | -  | 28.5      | -                | 16.9      | -                | 11.3      | -                | 7.8       |
| GLE600/180/2,5  | 24   | 16    | -  | 35        | -                | 25.9      | -                | 13.2      | -                | 9.8       |
| GLE660/180/2,5  | 28   | 19    | -  | 41.6      | -                | 34.3      | -                | 14.8      | -                | 11.8      |
| GLE720/180/2,5  | 34   | 22    | -  | 48.2      | -                | 43.4      | -                | 16.2      | -                | 13.7      |
| GLE780/180/2,5  | 40   | 25    | -  | 54.8      | -                | 49.3      | -                | 17.3      | -                | 17.6      |
| GLE840/180/2,5  | 46   | 28    | -  | 61.3      | -                | 55.2      | -                | 18.3      | -                | 19.6      |
| GLE900/180/2,5  | 52   | 31    | -  | 67.9      | -                | 61.1      | -                | 19        | -                | 23.5      |
| GLE960/180/2,5  | 58   | 34    | -  | 74.5      | -                | 67        | -                | 19.7      | -                | 25.5      |
| GLE1020/180/2,5 | 62   | 37    | -  | 81        | -                | 72.9      | -                | 20.2      | -                | 27.4      |
| GLE500/200/2,5  | 18   | 13    | -  | 24.1      | -                | 16.9      | -                | 11.7      | -                | 7.8       |
| GLE540/200/2,5  | 18   | 13    | -  | 27.7      | -                | 16.9      | -                | 11.6      | -                | 7.8       |
| GLE600/200/2,5  | 24   | 16    | -  | 35        | -                | 25.9      | -                | 13.7      | -                | 9.8       |
| GLE660/200/2,5  | 28   | 19    | -  | 41.6      | -                | 34.3      | -                | 15.5      | -                | 11.8      |
| GLE720/200/2,5  | 34   | 22    | -  | 48.2      | -                | 43.4      | -                | 17.1      | -                | 13.7      |



| Références      | Valeurs caractéristiques - Bois sur bois - Clouage total |       |  |           |                  |           |                  |           |                  |           |
|-----------------|--|-------|--|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
|                 | Fixations  |       | Valeurs caractéristiques - Bois C24 [kN] |           |                  |           |                  |           |                  |           |
|                 | Porteur  | Porté | R <sub>1,k</sub>                         |           | R <sub>2,k</sub> |           | R <sub>3,k</sub> |           | R <sub>4,k</sub> |           |
|                 | Qté  | Qté   | CNA4,0x35                                | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 |
| GLE780/200/2,5  | 40   | 25    | -  | 54.8      | -                | 49.3      | -                | 18.3      | -                | 17.6      |
| GLE840/200/2,5  | 46   | 28    | -  | 61.3      | -                | 55.2      | -                | 19.4      | -                | 19.6      |
| GLE900/200/2,5  | 52   | 31    | -  | 67.9      | -                | 61.1      | -                | 20.3      | -                | 23.5      |
| GLE960/200/2,5  | 58   | 34    | -  | 74.5      | -                | 67        | -                | 21.2      | -                | 25.5      |
| GLE1020/200/2,5 | 62   | 37    | -  | 81        | -                | 72.9      | -                | 21.8      | -                | 27.4      |
| GLE540/220/2,5  | 18   | 13    | -  | 26        | -                | 16.9      | -                | 11.8      | -                | 7.8       |
| GLE600/220/2,5  | 24   | 16    | -  | 35        | -                | 25.9      | -                | 14        | -                | 9.8       |
| GLE660/220/2,5  | 28   | 19    | -  | 41.6      | -                | 34.3      | -                | 16        | -                | 11.8      |
| GLE720/220/2,5  | 34   | 22    | -  | 48.2      | -                | 43.4      | -                | 17.7      | -                | 13.7      |
| GLE780/220/2,5  | 40   | 25    | -  | 54.8      | -                | 49.3      | -                | 19.2      | -                | 17.6      |
| GLE840/220/2,5  | 46   | 28    | -  | 61.3      | -                | 55.2      | -                | 20.5      | -                | 19.6      |
| GLE900/220/2,5  | 52   | 31    | -  | 67.9      | -                | 61.1      | -                | 21.5      | -                | 23.5      |
| GLE960/220/2,5  | 58   | 34    | -  | 74.5      | -                | 67        | -                | 22.5      | -                | 25.5      |
| GLE1020/220/2,5 | 62   | 37    | -  | 81        | -                | 72.9      | -                | 23.3      | -                | 27.4      |
| GLE540/240/2,5  | 18   | 13    | -  | 24.1      | -                | 16.9      | -                | 12        | -                | 7.8       |
| GLE600/240/2,5  | 24   | 16    | -  | 34.7      | -                | 25.9      | -                | 14.3      | -                | 9.8       |
| GLE660/240/2,5  | 28   | 19    | -  | 41.6      | -                | 34.3      | -                | 16.4      | -                | 11.8      |
| GLE720/240/2,5  | 34   | 22    | -  | 48.2      | -                | 43.4      | -                | 18.3      | -                | 13.7      |
| GLE780/240/2,5  | 40   | 25    | -  | 54.8      | -                | 49.3      | -                | 19.9      | -                | 17.6      |
| GLE840/240/2,5  | 46   | 28    | -  | 61.3      | -                | 55.2      | -                | 21.4      | -                | 19.6      |
| GLE900/240/2,5  | 52   | 31    | -  | 67.9      | -                | 61.1      | -                | 22.6      | -                | 23.5      |
| GLE960/240/2,5  | 58   | 34    | -  | 74.5      | -                | 67        | -                | 23.7      | -                | 25.5      |
| GLE1020/240/2,5 | 62   | 37    | -  | 81        | -                | 72.9      | -                | 24.6      | -                | 27.4      |

## Valeurs Caractéristiques - Bois sur bois - Clouage partiel



| Références    | Valeurs Caractéristiques - Bois sur bois - Clouage partiel |       |  |           |                  |           |                  |           |                  |           |
|---------------|--|-------|--|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
|               | Fixations  |       | Valeurs caractéristiques - Bois C24 [kN] |           |                  |           |                  |           |                  |           |
|               | Porteur  | Porté | R <sub>1,k</sub>                         |           | R <sub>2,k</sub> |           | R <sub>3,k</sub> |           | R <sub>4,k</sub> |           |
|               | Qté  | Qté   | CNA4,0x35                                | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 |
| GLE440/38/2,5 | 8  | 6     | 9.8                                      | -         | 3.9              | -         | 1.6              | -         | 4.9              | -         |
| GLE500/50/2,5 | 12   | 8     | 13                                       | -         | 8.8              | -         | 2.1              | -         | 7.3              | -         |
| GLE380/64/2,5 | 10   | 6     | -  | 13.1      | -                | 10.7      | -                | 3.3       | -                | 9.8       |
| GLE380/70/2,5 | 10   | 6     | -  | 13.1      | -                | 10.7      | -                | 3.5       | -                | 9.8       |
| GLE440/70/2,5 | 8  | 6     | -  | 13.1      | -                | 6.2       | -                | 3.7       | -                | 7.8       |
| GLE500/70/2,5 | 12   | 8     | -  | 17.5      | -                | 13.6      | -                | 3.9       | -                | 11.8      |
| GLE380/76/2,5 | 10   | 6     | -  | 13.1      | -                | 10.7      | -                | 3.7       | -                | 9.8       |
| GLE440/76/2,5 | 8  | 6     | -  | 13.1      | -                | 6.2       | -                | 3.9       | -                | 7.8       |
| GLE500/76/2,5 | 12   | 8     | -  | 17.5      | -                | 13.6      | -                | 4.1       | -                | 11.8      |
| GLE380/80/2,5 | 10   | 6     | -  | 13.1      | -                | 10.7      | -                | 3.8       | -                | 9.8       |

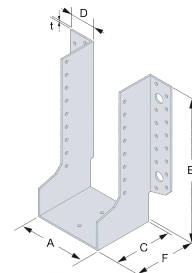
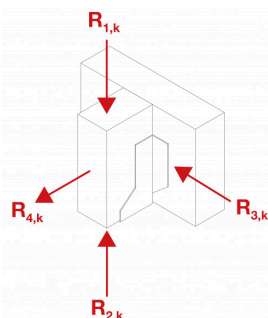
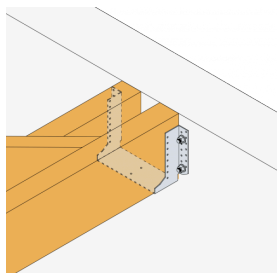
| Références      | Valeurs Caractéristiques - Bois sur bois - Clouage partiel |       |  |           |                  |           |                  |           |                  |           |
|-----------------|--|-------|--|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
|                 | Fixations  |       | Valeurs caractéristiques - Bois C24 [kN] |           |                  |           |                  |           |                  |           |
|                 | Porteur  | Porté | R <sub>1,k</sub>                         |           | R <sub>2,k</sub> |           | R <sub>3,k</sub> |           | R <sub>4,k</sub> |           |
|                 | Qté  | Qté   | CNA4,0x35                                | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 |
| GLE440/80/2,5   | 8  | 6     | -  | 13.1      | -                | 6.2       | -                | 4         | -                | 7.8       |
| GLE500/80/2,5   | 12   | 8     | -  | 17.5      | -                | 13.6      | -                | 4.3       | -                | 11.8      |
| GLE540/80/2,5   | 14   | 9     | -  | 19.7      | -                | 16.9      | -                | 4.5       | -                | 13.7      |
| GLE600/80/2,5   | 16   | 10    | -  | 21.9      | -                | 19.7      | -                | 4.5       | -                | 15.7      |
| GLE660/80/2,5   | 18   | 12    | -  | 26.3      | -                | 23.7      | -                | 4.8       | -                | 17.6      |
| GLE720/80/2,5   | 20   | 14    | -  | 30.7      | -                | 27.6      | -                | 5.2       | -                | 19.6      |
| GLE780/80/2,5   | 22   | 15    | -  | 32.9      | -                | 29.6      | -                | 5.2       | -                | 21.6      |
| GLE840/80/2,5   | 24   | 16    | -  | 35        | -                | 31.5      | -                | 5.2       | -                | 23.5      |
| GLE900/80/2,5   | 28   | 18    | -  | 39.4      | -                | 35.5      | -                | 5.3       | -                | 27.4      |
| GLE960/80/2,5   | 28   | 20    | -  | 43.8      | -                | 39.4      | -                | 5.5       | -                | 27.4      |
| GLE1020/80/2,5  | 32   | 21    | -  | 46        | -                | 41.4      | -                | 5.3       | -                | 31.4      |
| GLE380/90/2,5   | 10   | 6     | -  | 12.5      | -                | 10.7      | -                | 4.1       | -                | 9.8       |
| GLE440/90/2,5   | 8  | 6     | -  | 13.1      | -                | 6.2       | -                | 4.3       | -                | 7.8       |
| GLE500/90/2,5   | 12   | 8     | -  | 17.5      | -                | 13.6      | -                | 4.7       | -                | 11.8      |
| GLE540/90/2,5   | 14   | 9     | -  | 19.7      | -                | 16.9      | -                | 4.9       | -                | 13.7      |
| GLE600/90/2,5   | 16   | 10    | -  | 21.9      | -                | 19.7      | -                | 5         | -                | 15.7      |
| GLE660/90/2,5   | 18   | 12    | -  | 26.3      | -                | 23.7      | -                | 5.3       | -                | 17.6      |
| GLE720/90/2,5   | 20   | 14    | -  | 30.7      | -                | 27.6      | -                | 5.8       | -                | 19.6      |
| GLE780/90/2,5   | 22   | 15    | -  | 32.9      | -                | 29.6      | -                | 5.8       | -                | 21.6      |
| GLE840/90/2,5   | 24   | 16    | -  | 35        | -                | 31.5      | -                | 5.8       | -                | 23.5      |
| GLE900/90/2,5   | 28   | 18    | -  | 39.4      | -                | 35.5      | -                | 5.9       | -                | 27.4      |
| GLE960/90/2,5   | 28   | 20    | -  | 43.8      | -                | 39.4      | -                | 6.1       | -                | 27.4      |
| GLE1020/90/2,5  | 32   | 21    | -  | 46        | -                | 41.4      | -                | 5.9       | -                | 31.4      |
| GLE380/100/2,5  | 10   | 6     | -  | 11.9      | -                | 10.7      | -                | 4.4       | -                | 9.8       |
| GLE440/100/2,5  | 8  | 6     | -  | 13.1      | -                | 6.2       | -                | 4.5       | -                | 7.8       |
| GLE500/100/2,5  | 12   | 8     | -  | 17.5      | -                | 13.6      | -                | 5.1       | -                | 11.8      |
| GLE540/100/2,5  | 14   | 9     | -  | 19.7      | -                | 16.9      | -                | 5.3       | -                | 13.7      |
| GLE600/100/2,5  | 16   | 10    | -  | 21.9      | -                | 19.7      | -                | 5.4       | -                | 15.7      |
| GLE660/100/2,5  | 18   | 12    | -  | 26.3      | -                | 23.7      | -                | 5.8       | -                | 17.6      |
| GLE720/100/2,5  | 20   | 14    | -  | 30.7      | -                | 27.6      | -                | 6.3       | -                | 19.6      |
| GLE780/100/2,5  | 22   | 15    | -  | 32.9      | -                | 29.6      | -                | 6.4       | -                | 21.6      |
| GLE840/100/2,5  | 24   | 16    | -  | 35        | -                | 31.5      | -                | 6.3       | -                | 23.5      |
| GLE900/100/2,5  | 28   | 18    | -  | 39.4      | -                | 35.5      | -                | 6.5       | -                | 27.4      |
| GLE960/100/2,5  | 28   | 20    | -  | 43.8      | -                | 39.4      | -                | 6.8       | -                | 27.4      |
| GLE1020/100/2,5 | 32   | 21    | -  | 46        | -                | 41.4      | -                | 6.6       | -                | 31.4      |
| GLE500/120/2,5  | 12   | 8     | -  | 17.5      | -                | 13.6      | -                | 5.6       | -                | 11.8      |
| GLE540/120/2,5  | 14   | 9     | -  | 19.7      | -                | 16.9      | -                | 6         | -                | 13.7      |
| GLE600/120/2,5  | 16   | 10    | -  | 21.9      | -                | 19.7      | -                | 6.2       | -                | 15.7      |
| GLE660/120/2,5  | 18   | 12    | -  | 26.3      | -                | 23.7      | -                | 6.7       | -                | 17.6      |
| GLE720/120/2,5  | 20   | 14    | -  | 30.7      | -                | 27.6      | -                | 7.3       | -                | 19.6      |
| GLE780/120/2,5  | 22   | 15    | -  | 32.9      | -                | 29.6      | -                | 7.4       | -                | 21.6      |
| GLE840/120/2,5  | 24   | 16    | -  | 35        | -                | 31.5      | -                | 7.4       | -                | 23.5      |
| GLE900/120/2,5  | 28   | 18    | -  | 39.4      | -                | 35.5      | -                | 7.6       | -                | 27.4      |
| GLE960/120/2,5  | 28   | 20    | -  | 43.8      | -                | 39.4      | -                | 8         | -                | 27.4      |
| GLE1020/120/2,5 | 32   | 21    | -  | 46        | -                | 41.4      | -                | 7.8       | -                | 31.4      |
| GLE500/140/2,5  | 12   | 8     | -  | 17.3      | -                | 13.6      | -                | 6.1       | -                | 11.8      |
| GLE540/140/2,5  | 14   | 9     | -  | 19.7      | -                | 16.9      | -                | 6.5       | -                | 13.7      |
| GLE600/140/2,5  | 16   | 10    | -  | 21.9      | -                | 19.7      | -                | 6.8       | -                | 15.7      |
| GLE660/140/2,5  | 18   | 12    | -  | 26.3      | -                | 23.7      | -                | 7.5       | -                | 17.6      |
| GLE720/140/2,5  | 20   | 14    | -  | 30.7      | -                | 27.6      | -                | 8.2       | -                | 19.6      |
| GLE780/140/2,5  | 22   | 15    | -  | 32.9      | -                | 29.6      | -                | 8.4       | -                | 21.6      |
| GLE840/140/2,5  | 24   | 16    | -  | 35        | -                | 31.5      | -                | 8.4       | -                | 23.5      |
| GLE900/140/2,5  | 28   | 18    | -  | 39.4      | -                | 35.5      | -                | 8.7       | -                | 27.4      |
| GLE960/140/2,5  | 28   | 20    | -  | 43.8      | -                | 39.4      | -                | 9.1       | -                | 27.4      |
| GLE1020/140/2,5 | 32   | 21    | -  | 46        | -                | 41.4      | -                | 8.9       | -                | 31.4      |
| GLE500/160/2,5  | 12   | 8     | -  | 16.1      | -                | 13.6      | -                | 6.5       | -                | 11.8      |



| Références      | Valeurs Caractéristiques - Bois sur bois - Clouage partiel |       |  |           |                  |           |                  |           |                  |           |
|-----------------|--|-------|--|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
|                 | Fixations  |       | Valeurs caractéristiques - Bois C24 [kN] |           |                  |           |                  |           |                  |           |
|                 | Porteur  | Porté | R <sub>1,k</sub>                         |           | R <sub>2,k</sub> |           | R <sub>3,k</sub> |           | R <sub>4,k</sub> |           |
|                 | Qté  | Qté   | CNA4,0x35                                | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 |
| GLE540/160/2,5  | 14   | 9     | -  | 19.7      | -                | 16.9      | -                | 7         | -                | 13.7      |
| GLE600/160/2,5  | 16   | 10    | -  | 21.9      | -                | 19.7      | -                | 7.3       | -                | 15.7      |
| GLE660/160/2,5  | 18   | 12    | -  | 26.3      | -                | 23.7      | -                | 8.1       | -                | 17.6      |
| GLE720/160/2,5  | 20   | 14    | -  | 30.7      | -                | 27.6      | -                | 9         | -                | 19.6      |
| GLE780/160/2,5  | 22   | 15    | -  | 32.9      | -                | 29.6      | -                | 9.2       | -                | 21.6      |
| GLE840/160/2,5  | 24   | 16    | -  | 35        | -                | 31.5      | -                | 9.3       | -                | 23.5      |
| GLE900/160/2,5  | 28   | 18    | -  | 39.4      | -                | 35.5      | -                | 9.7       | -                | 27.4      |
| GLE960/160/2,5  | 28   | 20    | -  | 43.8      | -                | 39.4      | -                | 10.2      | -                | 27.4      |
| GLE1020/160/2,5 | 32   | 21    | -  | 46        | -                | 41.4      | -                | 10        | -                | 31.4      |
| GLE500/180/2,5  | 8  | 7     | -  | 12.4      | -                | 7.7       | -                | 6.2       | -                | 7.8       |
| GLE540/180/2,5  | 8  | 7     | -  | 13.6      | -                | 7.7       | -                | 6.1       | -                | 7.8       |
| GLE600/180/2,5  | 10   | 8     | -  | 17.5      | -                | 10.7      | -                | 6.7       | -                | 9.8       |
| GLE660/180/2,5  | 12   | 10    | -  | 21.3      | -                | 15.1      | -                | 7.8       | -                | 11.8      |
| GLE720/180/2,5  | 14   | 12    | -  | 25.8      | -                | 18.4      | -                | 9         | -                | 13.7      |
| GLE780/180/2,5  | 18   | 13    | -  | 28.5      | -                | 25.6      | -                | 9         | -                | 17.6      |
| GLE840/180/2,5  | 20   | 14    | -  | 30.7      | -                | 27.6      | -                | 9.2       | -                | 19.6      |
| GLE900/180/2,5  | 24   | 16    | -  | 35        | -                | 31.5      | -                | 9.8       | -                | 23.5      |
| GLE960/180/2,5  | 26   | 18    | -  | 39.4      | -                | 35.5      | -                | 10.6      | -                | 25.5      |
| GLE1020/180/2,5 | 28   | 19    | -  | 41.6      | -                | 37.4      | -                | 10.4      | -                | 27.4      |
| GLE500/200/2,5  | 8  | 7     | -  | 11.6      | -                | 7.7       | -                | 6.3       | -                | 7.8       |
| GLE540/200/2,5  | 8  | 7     | -  | 13.1      | -                | 7.7       | -                | 6.3       | -                | 7.8       |
| GLE600/200/2,5  | 10   | 8     | -  | 17.2      | -                | 10.7      | -                | 6.9       | -                | 9.8       |
| GLE660/200/2,5  | 12   | 10    | -  | 20.7      | -                | 15.1      | -                | 8.2       | -                | 11.8      |
| GLE720/200/2,5  | 14   | 12    | -  | 25.2      | -                | 18.4      | -                | 9.4       | -                | 13.7      |
| GLE780/200/2,5  | 18   | 13    | -  | 28.5      | -                | 25.6      | -                | 9.6       | -                | 17.6      |
| GLE840/200/2,5  | 20   | 14    | -  | 30.7      | -                | 27.6      | -                | 9.8       | -                | 19.6      |
| GLE900/200/2,5  | 24   | 16    | -  | 35        | -                | 31.5      | -                | 10.5      | -                | 23.5      |
| GLE960/200/2,5  | 26   | 18    | -  | 39.4      | -                | 35.5      | -                | 11.3      | -                | 25.5      |
| GLE1020/200/2,5 | 28   | 19    | -  | 41.6      | -                | 37.4      | -                | 11.2      | -                | 27.4      |
| GLE540/220/2,5  | 8  | 7     | -  | 12.4      | -                | 7.7       | -                | 6.4       | -                | 7.8       |
| GLE600/220/2,5  | 10   | 8     | -  | 16.5      | -                | 10.7      | -                | 7.1       | -                | 9.8       |
| GLE660/220/2,5  | 12   | 10    | -  | 20        | -                | 15.1      | -                | 8.4       | -                | 11.8      |
| GLE720/220/2,5  | 14   | 12    | -  | 24.6      | -                | 18.4      | -                | 9.8       | -                | 13.7      |
| GLE780/220/2,5  | 18   | 13    | -  | 28.5      | -                | 25.6      | -                | 10        | -                | 17.6      |
| GLE840/220/2,5  | 20   | 14    | -  | 30.7      | -                | 27.6      | -                | 10.3      | -                | 19.6      |
| GLE900/220/2,5  | 24   | 16    | -  | 35        | -                | 31.5      | -                | 11.1      | -                | 23.5      |
| GLE960/220/2,5  | 26   | 18    | -  | 39.4      | -                | 35.5      | -                | 12.1      | -                | 25.5      |
| GLE1020/220/2,5 | 28   | 19    | -  | 41.6      | -                | 37.4      | -                | 12        | -                | 27.4      |
| GLE540/240/2,5  | 8  | 7     | -  | 11.6      | -                | 7.7       | -                | 6.5       | -                | 7.8       |
| GLE600/240/2,5  | 10   | 8     | -  | 15.8      | -                | 10.7      | -                | 7.2       | -                | 9.8       |
| GLE660/240/2,5  | 12   | 10    | -  | 19.2      | -                | 15.1      | -                | 8.7       | -                | 11.8      |
| GLE720/240/2,5  | 14   | 12    | -  | 23.9      | -                | 18.4      | -                | 10.1      | -                | 13.7      |
| GLE780/240/2,5  | 18   | 13    | -  | 28.5      | -                | 25.6      | -                | 10.4      | -                | 17.6      |
| GLE840/240/2,5  | 20   | 14    | -  | 30.7      | -                | 27.6      | -                | 10.8      | -                | 19.6      |
| GLE900/240/2,5  | 24   | 16    | -  | 35        | -                | 31.5      | -                | 11.7      | -                | 23.5      |
| GLE960/240/2,5  | 26   | 18    | -  | 39.4      | -                | 35.5      | -                | 12.7      | -                | 25.5      |
| GLE1020/240/2,5 | 28   | 19    | -  | 41.6      | -                | 37.4      | -                | 12.6      | -                | 27.4      |

Les valeurs données dans le tableau ci-dessus sont valables pour une application solive sur poutre et solive sur poteau sous réserve de respecter les plans de clouages partiels spécifiques à chaque configuration données dans notre ETE-06/0270 page 17.

## Valeurs caractéristiques - Bois sur béton



| Références     | Valeurs caractéristiques - Bois sur béton ou acier |      |       |       |  |           |                  |           |                  |           |                  |           |
|----------------|--|------|-------|-------|--|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
|                | Fixations  |      |       |       | Valeurs caractéristiques - Bois C24 [kN] |           |                  |           |                  |           |                  |           |
|                | Porteur  |      | Porté |       | R <sub>1,k</sub>                         |           | R <sub>2,k</sub> |           | R <sub>3,k</sub> |           | R <sub>4,k</sub> |           |
|                | Qté  | Type | Qté   | Type  | CNA4,0x35                                | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 |
| GLE440/38/2,5  | 4  | Ø12* | 12    | CNA** | 33.4                                     | -         | 21.3             | -         | 20               | -         | 10               | -         |
| GLE500/50/2,5  | 4  | Ø12* | 15    | CNA** | 42.2                                     | -         | 26.6             | -         | 20               | -         | 10               | -         |
| GLE380/64/2,5  | 2  | Ø12* | 11    | CNA** | -  | 19.8      | -                | 19.3      | -                | 10        | -                | 5         |
| GLE380/70/2,5  | 2  | Ø12* | 11    | CNA** | -  | 19.8      | -                | 19.3      | -                | 10        | -                | 5         |
| GLE440/70/2,5  | 4  | Ø12* | 12    | CNA** | -  | 39.1      | -                | 21.3      | -                | 20        | -                | 10        |
| GLE500/70/2,5  | 4  | Ø12* | 15    | CNA** | -  | 45.7      | -                | 26.6      | -                | 20        | -                | 10        |
| GLE380/76/2,5  | 2  | Ø12* | 11    | CNA** | -  | 19.8      | -                | 19.3      | -                | 10        | -                | 5         |
| GLE440/76/2,5  | 4  | Ø12* | 12    | CNA** | -  | 40.1      | -                | 21.3      | -                | 20        | -                | 10        |
| GLE500/76/2,5  | 4  | Ø12* | 15    | CNA** | -  | 46.8      | -                | 26.6      | -                | 20        | -                | 10        |
| GLE380/80/2,5  | 2  | Ø12* | 11    | CNA** | -  | 19.8      | -                | 19.3      | -                | 10        | -                | 5         |
| GLE440/80/2,5  | 4  | Ø12* | 12    | CNA** | -  | 40.9      | -                | 21.3      | -                | 20        | -                | 10        |
| GLE500/80/2,5  | 4  | Ø12* | 15    | CNA** | -  | 47.5      | -                | 26.6      | -                | 20        | -                | 10        |
| GLE540/80/2,5  | 4  | Ø12* | 17    | CNA** | -  | 51.9      | -                | 30.1      | -                | 20        | -                | 10        |
| GLE600/80/2,5  | 4  | Ø12* | 20    | CNA** | -  | 58.6      | -                | 35.5      | -                | 20        | -                | 10        |
| GLE660/80/2,5  | 6  | Ø12* | 23    | CNA** | -  | 65.2      | -                | 40.8      | -                | 24.1      | -                | 15        |
| GLE720/80/2,5  | 6  | Ø12* | 26    | CNA** | -  | 71.9      | -                | 46.1      | -                | 24.1      | -                | 15        |
| GLE780/80/2,5  | 6  | Ø12* | 29    | CNA** | -  | 78.5      | -                | 51.4      | -                | 24.1      | -                | 15        |
| GLE840/80/2,5  | 6  | Ø12* | 32    | CNA** | -  | 85.2      | -                | 56.7      | -                | 24.1      | -                | 15        |
| GLE900/80/2,5  | 6  | Ø12* | 35    | CNA** | -  | 91.8      | -                | 62.1      | -                | 24.1      | -                | 15        |
| GLE960/80/2,5  | 8  | Ø12* | 38    | CNA** | -  | 98.5      | -                | 67.4      | -                | 27        | -                | 20        |
| GLE1020/80/2,5 | 8  | Ø12* | 41    | CNA** | -  | 105.1     | -                | 72.7      | -                | 27        | -                | 20        |
| GLE380/90/2,5  | 2  | Ø12* | 11    | CNA** | -  | 19.8      | -                | 19.3      | -                | 10        | -                | 5         |
| GLE440/90/2,5  | 4  | Ø12* | 12    | CNA** | -  | 42.6      | -                | 21.3      | -                | 20        | -                | 10        |
| GLE500/90/2,5  | 4  | Ø12* | 15    | CNA** | -  | 49.3      | -                | 26.6      | -                | 20        | -                | 10        |
| GLE540/90/2,5  | 4  | Ø12* | 17    | CNA** | -  | 53.7      | -                | 30.1      | -                | 20        | -                | 10        |
| GLE600/90/2,5  | 4  | Ø12* | 20    | CNA** | -  | 60.4      | -                | 35.5      | -                | 20        | -                | 10        |
| GLE660/90/2,5  | 6  | Ø12* | 23    | CNA** | -  | 67        | -                | 40.8      | -                | 24.1      | -                | 15        |
| GLE720/90/2,5  | 6  | Ø12* | 26    | CNA** | -  | 73.7      | -                | 46.1      | -                | 24.1      | -                | 15        |
| GLE780/90/2,5  | 6  | Ø12* | 29    | CNA** | -  | 80.3      | -                | 51.4      | -                | 24.1      | -                | 15        |
| GLE840/90/2,5  | 6  | Ø12* | 32    | CNA** | -  | 87        | -                | 56.7      | -                | 24.1      | -                | 15        |
| GLE900/90/2,5  | 6  | Ø12* | 35    | CNA** | -  | 93.6      | -                | 62.1      | -                | 24.1      | -                | 15        |
| GLE960/90/2,5  | 8  | Ø12* | 38    | CNA** | -  | 100.3     | -                | 67.4      | -                | 27        | -                | 20        |
| GLE1020/90/2,5 | 8  | Ø12* | 41    | CNA** | -  | 106.9     | -                | 72.7      | -                | 27        | -                | 20        |
| GLE380/100/2,5 | 2  | Ø12* | 11    | CNA** | -  | 19.8      | -                | 19.3      | -                | 10        | -                | 5         |
| GLE440/100/2,5 | 4  | Ø12* | 12    | CNA** | -  | 44.4      | -                | 21.3      | -                | 20        | -                | 10        |
| GLE500/100/2,5 | 4  | Ø12* | 15    | CNA** | -  | 51.1      | -                | 26.6      | -                | 20        | -                | 10        |
| GLE540/100/2,5 | 4  | Ø12* | 17    | CNA** | -  | 55.5      | -                | 30.1      | -                | 20        | -                | 10        |
| GLE600/100/2,5 | 4  | Ø12* | 20    | CNA** | -  | 62.1      | -                | 35.5      | -                | 20        | -                | 10        |
| GLE660/100/2,5 | 6  | Ø12* | 23    | CNA** | -  | 68.8      | -                | 40.8      | -                | 24.1      | -                | 15        |
| GLE720/100/2,5 | 6  | Ø12* | 26    | CNA** | -  | 75.4      | -                | 46.1      | -                | 24.1      | -                | 15        |

| Références      | Valeurs caractéristiques - Bois sur béton ou acier |      |       |       |  |           |                  |           |                  |           |                  |           |
|-----------------|--|------|-------|-------|--|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
|                 | Fixations  |      |       |       | Valeurs caractéristiques - Bois C24 [kN] |           |                  |           |                  |           |                  |           |
|                 | Porteur  |      | Porté |       | R <sub>1,k</sub>                         |           | R <sub>2,k</sub> |           | R <sub>3,k</sub> |           | R <sub>4,k</sub> |           |
|                 | Qté  | Type | Qté   | Type  | CNA4,0x35                                | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 |
| GLE780/100/2,5  | 6  | Ø12* | 29    | CNA** | -  | 82.1      | -                | 51.4      | -                | 24.1      | -                | 15        |
| GLE840/100/2,5  | 6  | Ø12* | 32    | CNA** | -  | 88.7      | -                | 56.7      | -                | 24.1      | -                | 15        |
| GLE900/100/2,5  | 6  | Ø12* | 35    | CNA** | -  | 95.4      | -                | 62.1      | -                | 24.1      | -                | 15        |
| GLE960/100/2,5  | 8  | Ø12* | 38    | CNA** | -  | 102       | -                | 67.4      | -                | 27        | -                | 20        |
| GLE1020/100/2,5 | 8  | Ø12* | 41    | CNA** | -  | 108.7     | -                | 72.7      | -                | 27        | -                | 20        |
| GLE500/120/2,5  | 4  | Ø12* | 15    | CNA** | -  | 54.6      | -                | 26.6      | -                | 20        | -                | 10        |
| GLE540/120/2,5  | 4  | Ø12* | 17    | CNA** | -  | 59.1      | -                | 30.1      | -                | 20        | -                | 10        |
| GLE600/120/2,5  | 4  | Ø12* | 20    | CNA** | -  | 65.7      | -                | 35.5      | -                | 20        | -                | 10        |
| GLE660/120/2,5  | 6  | Ø12* | 23    | CNA** | -  | 72.4      | -                | 40.8      | -                | 24.1      | -                | 15        |
| GLE720/120/2,5  | 6  | Ø12* | 26    | CNA** | -  | 79        | -                | 46.1      | -                | 24.1      | -                | 15        |
| GLE780/120/2,5  | 6  | Ø12* | 29    | CNA** | -  | 85.7      | -                | 51.4      | -                | 24.1      | -                | 15        |
| GLE840/120/2,5  | 6  | Ø12* | 32    | CNA** | -  | 92.3      | -                | 56.7      | -                | 24.1      | -                | 15        |
| GLE900/120/2,5  | 6  | Ø12* | 35    | CNA** | -  | 99        | -                | 62.1      | -                | 24.1      | -                | 15        |
| GLE960/120/2,5  | 8  | Ø12* | 38    | CNA** | -  | 105.6     | -                | 67.4      | -                | 27        | -                | 20        |
| GLE1020/120/2,5 | 8  | Ø12* | 41    | CNA** | -  | 112.3     | -                | 72.7      | -                | 27        | -                | 20        |
| GLE500/140/2,5  | 4  | Ø12* | 15    | CNA** | -  | 58.2      | -                | 26.6      | -                | 20        | -                | 10        |
| GLE540/140/2,5  | 4  | Ø12* | 17    | CNA** | -  | 62.6      | -                | 30.1      | -                | 20        | -                | 10        |
| GLE600/140/2,5  | 4  | Ø12* | 20    | CNA** | -  | 69.3      | -                | 35.5      | -                | 20        | -                | 10        |
| GLE660/140/2,5  | 6  | Ø12* | 23    | CNA** | -  | 75.9      | -                | 40.8      | -                | 24.1      | -                | 15        |
| GLE720/140/2,5  | 6  | Ø12* | 26    | CNA** | -  | 82.6      | -                | 46.1      | -                | 24.1      | -                | 15        |
| GLE780/140/2,5  | 6  | Ø12* | 29    | CNA** | -  | 89.2      | -                | 51.4      | -                | 24.1      | -                | 15        |
| GLE840/140/2,5  | 6  | Ø12* | 32    | CNA** | -  | 95.9      | -                | 56.7      | -                | 24.1      | -                | 15        |
| GLE900/140/2,5  | 6  | Ø12* | 35    | CNA** | -  | 102.5     | -                | 62.1      | -                | 24.1      | -                | 15        |
| GLE960/140/2,5  | 8  | Ø12* | 38    | CNA** | -  | 109.2     | -                | 67.4      | -                | 27        | -                | 20        |
| GLE1020/140/2,5 | 8  | Ø12* | 41    | CNA** | -  | 115.8     | -                | 72.7      | -                | 27        | -                | 20        |
| GLE500/160/2,5  | 4  | Ø12* | 15    | CNA** | -  | 61.8      | -                | 26.6      | -                | 20        | -                | 10        |
| GLE540/160/2,5  | 4  | Ø12* | 17    | CNA** | -  | 66.2      | -                | 30.1      | -                | 20        | -                | 10        |
| GLE600/160/2,5  | 4  | Ø12* | 20    | CNA** | -  | 72.8      | -                | 35.5      | -                | 20        | -                | 10        |
| GLE660/160/2,5  | 6  | Ø12* | 23    | CNA** | -  | 79.5      | -                | 40.8      | -                | 24.1      | -                | 15        |
| GLE720/160/2,5  | 6  | Ø12* | 26    | CNA** | -  | 86.1      | -                | 46.1      | -                | 24.1      | -                | 15        |
| GLE780/160/2,5  | 6  | Ø12* | 29    | CNA** | -  | 92.8      | -                | 51.4      | -                | 24.1      | -                | 15        |
| GLE840/160/2,5  | 6  | Ø12* | 32    | CNA** | -  | 99.4      | -                | 56.7      | -                | 24.1      | -                | 15        |
| GLE900/160/2,5  | 6  | Ø12* | 35    | CNA** | -  | 106.1     | -                | 62.1      | -                | 24.1      | -                | 15        |
| GLE960/160/2,5  | 8  | Ø12* | 38    | CNA** | -  | 112.7     | -                | 67.4      | -                | 27        | -                | 20        |
| GLE1020/160/2,5 | 8  | Ø12* | 41    | CNA** | -  | 119.4     | -                | 72.7      | -                | 27        | -                | 20        |
| GLE500/180/2,5  | 4  | Ø12* | 13    | CNA** | -  | 60.9      | -                | 23        | -                | 20        | -                | 10        |
| GLE540/180/2,5  | 4  | Ø12* | 13    | CNA** | -  | 60.9      | -                | 23        | -                | 20        | -                | 10        |
| GLE600/180/2,5  | 4  | Ø12* | 16    | CNA** | -  | 67.5      | -                | 28.4      | -                | 20        | -                | 10        |
| GLE660/180/2,5  | 6  | Ø12* | 19    | CNA** | -  | 74.2      | -                | 33.7      | -                | 24.1      | -                | 15        |
| GLE720/180/2,5  | 6  | Ø12* | 22    | CNA** | -  | 80.8      | -                | 39        | -                | 24.1      | -                | 15        |
| GLE780/180/2,5  | 6  | Ø12* | 25    | CNA** | -  | 87.5      | -                | 44.3      | -                | 24.1      | -                | 15        |
| GLE840/180/2,5  | 6  | Ø12* | 28    | CNA** | -  | 94.1      | -                | 49.6      | -                | 24.1      | -                | 15        |
| GLE900/180/2,5  | 6  | Ø12* | 31    | CNA** | -  | 100.8     | -                | 55        | -                | 24.1      | -                | 15        |
| GLE960/180/2,5  | 8  | Ø12* | 34    | CNA** | -  | 107.4     | -                | 60.3      | -                | 24.1      | -                | 15        |
| GLE1020/180/2,5 | 8  | Ø12* | 37    | CNA** | -  | 114.1     | -                | 65.6      | -                | 27        | -                | 20        |
| GLE500/200/2,5  | 4  | Ø12* | 13    | CNA** | -  | 64.5      | -                | 23        | -                | 20        | -                | 10        |
| GLE540/200/2,5  | 4  | Ø12* | 13    | CNA** | -  | 64.5      | -                | 23        | -                | 20        | -                | 10        |
| GLE600/200/2,5  | 4  | Ø12* | 16    | CNA** | -  | 71.1      | -                | 28.4      | -                | 20        | -                | 10        |
| GLE660/200/2,5  | 6  | Ø12* | 19    | CNA** | -  | 77.8      | -                | 33.7      | -                | 24.1      | -                | 15        |
| GLE720/200/2,5  | 6  | Ø12* | 22    | CNA** | -  | 84.4      | -                | 39        | -                | 24.1      | -                | 15        |
| GLE780/200/2,5  | 6  | Ø12* | 25    | CNA** | -  | 91.1      | -                | 44.3      | -                | 24.1      | -                | 15        |
| GLE840/200/2,5  | 6  | Ø12* | 28    | CNA** | -  | 97.7      | -                | 49.6      | -                | 24.1      | -                | 15        |
| GLE900/200/2,5  | 6  | Ø12* | 31    | CNA** | -  | 104.4     | -                | 55        | -                | 24.1      | -                | 15        |
| GLE960/200/2,5  | 8  | Ø12* | 34    | CNA** | -  | 111       | -                | 60.3      | -                | 24.1      | -                | 15        |
| GLE1020/200/2,5 | 8  | Ø12* | 37    | CNA** | -  | 117.6     | -                | 65.6      | -                | 27        | -                | 20        |
| GLE540/220/2,5  | 4  | Ø12* | 13    | CNA** | -  | 64.5      | -                | 23        | -                | 20        | -                | 10        |

| Références      | Valeurs caractéristiques - Bois sur béton ou acier |      |       |       |  |           |                  |           |                  |           |                  |           |
|-----------------|--|------|-------|-------|--|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
|                 | Fixations  |      |       |       | Valeurs caractéristiques - Bois C24 [kN] |           |                  |           |                  |           |                  |           |
|                 | Porteur  |      | Porté |       | R <sub>1,k</sub>                         |           | R <sub>2,k</sub> |           | R <sub>3,k</sub> |           | R <sub>4,k</sub> |           |
|                 | Qté  | Type | Qté   | Type  | CNA4,0x35                                | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 | CNA4,0x35        | CNA4,0x50 |
| GLE600/220/2,5  | 4  | Ø12* | 16    | CNA** | -  | 71.1      | -                | 28.4      | -                | 20        | -                | 10        |
| GLE660/220/2,5  | 6  | Ø12* | 19    | CNA** | -  | 77.8      | -                | 33.7      | -                | 24.1      | -                | 15        |
| GLE720/220/2,5  | 6  | Ø12* | 22    | CNA** | -  | 84.4      | -                | 39        | -                | 24.1      | -                | 15        |
| GLE780/220/2,5  | 6  | Ø12* | 25    | CNA** | -  | 91.1      | -                | 44.3      | -                | 24.1      | -                | 15        |
| GLE840/220/2,5  | 6  | Ø12* | 28    | CNA** | -  | 97.7      | -                | 49.6      | -                | 24.1      | -                | 15        |
| GLE900/220/2,5  | 6  | Ø12* | 31    | CNA** | -  | 104.4     | -                | 55        | -                | 24.1      | -                | 15        |
| GLE960/220/2,5  | 8  | Ø12* | 34    | CNA** | -  | 111       | -                | 60.3      | -                | 24.1      | -                | 15        |
| GLE1020/220/2,5 | 8  | Ø12* | 37    | CNA** | -  | 117.6     | -                | 65.6      | -                | 27        | -                | 20        |
| GLE540/240/2,5  | 4  | Ø12* | 13    | CNA** | -  | 64.5      | -                | 23        | -                | 20        | -                | 10        |
| GLE600/240/2,5  | 4  | Ø12* | 16    | CNA** | -  | 71.1      | -                | 28.4      | -                | 20        | -                | 10        |
| GLE660/240/2,5  | 6  | Ø12* | 19    | CNA** | -  | 77.8      | -                | 33.7      | -                | 24.1      | -                | 15        |
| GLE720/240/2,5  | 6  | Ø12* | 22    | CNA** | -  | 84.4      | -                | 39        | -                | 24.1      | -                | 15        |
| GLE780/240/2,5  | 6  | Ø12* | 25    | CNA** | -  | 91.1      | -                | 44.3      | -                | 24.1      | -                | 15        |
| GLE840/240/2,5  | 6  | Ø12* | 28    | CNA** | -  | 97.7      | -                | 49.6      | -                | 24.1      | -                | 15        |
| GLE900/240/2,5  | 6  | Ø12* | 31    | CNA** | -  | 104.4     | -                | 55        | -                | 24.1      | -                | 15        |
| GLE960/240/2,5  | 8  | Ø12* | 34    | CNA** | -  | 111       | -                | 60.3      | -                | 24.1      | -                | 15        |
| GLE1020/240/2,5 | 8  | Ø12* | 37    | CNA** | -  | 117.6     | -                | 65.6      | -                | 27        | -                | 20        |

Les dimensions A, B et C sont les dimensions intérieures du sabot. Les valeurs de reprise de charge sur béton indiquées dans ce tableau sont données dans le cas d'une fixation en pleine dalle. Dans un contexte d'application différente, il convient au concepteur de s'assurer de la bonne tenue des ancrages (une aide au dimensionnement est disponible sur notre logiciel Anchor Designer, téléchargeable gratuitement sur ce site).

### Valeurs Caractéristiques - Connexion bois sur bois petites largeurs - avec vis connecteur SSH

| Références   | Valeurs Caractéristiques - Bois sur bois petites largeurs - avec vis connecteur SSH |     |           |            |       |      |  |           |                  |           |                  |           |                  |           |
|--------------|---|-----|-----------|------------|-------|------|--|-----------|------------------|-----------|------------------|-----------|------------------|-----------|
|              | Largeur de la poutre [mm]   |     | Fixations |            |       |      | Valeurs Caractéristiques - Bois C24 [kN] |           |                  |           |                  |           |                  |           |
|              |   |     | Porteur   |            | Porté |      | R <sub>1,k</sub>                         |           | R <sub>2,k</sub> |           | R <sub>3,k</sub> |           | R <sub>4,k</sub> |           |
|              | Min   | Max | Qté       | Type       | Qté   | Type | CNA4.0x35                                | CNA4.0x50 | CNA4.0x35        | CNA4.0x50 | CNA4.0x35        | CNA4.0x50 | CNA4.0x35        | CNA4.0x50 |
| GLE380/2.5X  | 32  | 110 | 2         | SSH12.0x60 | 11    | CNA  | 12.4                                     | 12.4      | 12.4             | 12.4      | 1.5              | 2.2       | 5                | 5         |
| GLE440/2.5X  | 32  | 160 | 4         | SSH12.0x60 | 12    | CNA* | 19.6                                     | 22.1      | 19.5             | 22.1      | 3.7              | 4.6       | 10               | 10        |
| GLE500/2.5X  | 32  | 160 | 4         | SSH12.0x60 | 15    | CNA  | 22.6                                     | 23.6      | 22.6             | 23.6      | 3.5              | 4.1       | 10               | 10        |
| GLE540/2.5X  | 32  | 160 | 4         | SSH12.0x60 | 17    | CNA* | 23.8                                     | 24        | 23.8             | 24        | 3.7              | 4.2       | 10               | 10        |
| GLE600/2.5X  | 32  | 160 | 4         | SSH12.0x60 | 20    | CNA  | 24.2                                     | 24.2      | 24.2             | 24.2      | 3.5              | 3.9       | 10               | 10        |
| GLE660/2.5X  | 32  | 160 | 6         | SSH12.0x60 | 23    | CNA* | 35.5                                     | 35.9      | 35.5             | 35.9      | 4.8              | 5.3       | 15               | 15        |
| GLE720/2.5X  | 32  | 160 | 6         | SSH12.0x60 | 26    | CNA  | 36.2                                     | 36.2      | 36.2             | 36.2      | 4.6              | 5         | 15               | 15        |
| GLE780/2.5X  | 32  | 160 | 6         | SSH12.0x60 | 29    | CNA* | 36.6                                     | 36.6      | 36.6             | 36.6      | 5.2              | 5.6       | 15               | 15        |
| GLE840/2.5X  | 32  | 160 | 6         | SSH12.0x60 | 32    | CNA  | 36.7                                     | 36.7      | 36.7             | 36.7      | 5.1              | 5.4       | 15               | 15        |
| GLE900/2.5X  | 32  | 160 | 6         | SSH12.0x60 | 35    | CNA* | 36.8                                     | 36.8      | 36.8             | 36.8      | 5.3              | 5.9       | 15               | 15        |
| GLE960/2.5X  | 32  | 160 | 8         | SSH12.0x60 | 38    | CNA  | 48.9                                     | 48.9      | 48.9             | 48.9      | 5.4              | 6.5       | 20               | 20        |
| GLE1020/2.5X | 32  | 160 | 8         | SSH12.0x60 | 41    | CNA* | 49.2                                     | 49.2      | 49.2             | 49.2      | 5.4              | 7.2       | 20               | 20        |

La tension transversale doit être vérifiée par l'utilisateur et car elle peut être prépondérante. Ces valeurs sont valides si les distances minimum de SSH ci-dessous sont respectées:

| Vis     | Distance min de rive chargée a <sub>2,t</sub> | Distance min de rive non chargée a <sub>2,c</sub> |
|---------|---|---|
| SSH12.0 | 80  | 40  |

Pour des distances plus faibles, se référer à l'ETA-06/0270 et l'EN1995.

L'épaisseur minimale du bois porteur est de 73 mm pour l'utilisation des SSH Ø12x60.

### Valeurs Caractéristiques - Connexion bois sur bois grandes largeurs - avec vis connecteur SSH

| Références      | Valeurs Caractéristiques - Bois sur bois grandes largeurs - avec vis connecteur SSH |     |           |            |       |           |  |           |                  |           |                  |           |                  |           |           |
|-----------------|---|-----|-----------|------------|-------|-----------|--|-----------|------------------|-----------|------------------|-----------|------------------|-----------|-----------|
|                 | Largeur de la poutre  |     | Fixations |            |       |           | Valeurs Caractéristiques - Bois C24 [kN] |           |                  |           |                  |           |                  |           |           |
|                 | min   | max | Porteur   |            | Porté |           | R <sub>1,k</sub>                         |           | R <sub>2,k</sub> |           | R <sub>3,k</sub> |           | R <sub>4,k</sub> |           |           |
|                 |   | Qté | Type      | Qté        | Type  | CNA4.0x30 | CNA4.0x50                                | CNA4.0x30 | CNA4.0x50        | CNA4.0x30 | CNA4.0x50        | CNA4.0x30 | CNA4.0x50        | CNA4.0x30 | CNA4.0x50 |
| GLE500/2.5X-AL  | 161   | 200 | 4         | SSH12.0x60 | 13    | CNA*      | 20.5                                     | 22.7      | 20.7             | 22.7      | 7.4              | 10.5      | 10               | 10        |           |
| GLE540/2.5X-AL  | 161   | 240 | 4         | SSH12.0x60 | 13    | CNA*      | 20.5                                     | 22.7      | 20.7             | 22.7      | 7.4              | 9.6       | 10               | 10        |           |
| GLE600/2.5X-AL  | 161   | 240 | 4         | SSH12.0x60 | 16    | CNA*      | 23.1                                     | 23.6      | 23.2             | 23.6      | 8.1              | 8.1       | 10               | 10        |           |
| GLE660/2.5X-AL  | 161   | 240 | 6         | SSH12.0x60 | 19    | CNA*      | 31.3                                     | 35        | 31.5             | 35        | 10.3             | 10.7      | 15               | 15        |           |
| GLE720/2.5X-AL  | 161   | 240 | 6         | SSH12.0x60 | 22    | CNA*      | 34.7                                     | 35.6      | 34.8             | 35.6      | 9.5              | 9.5       | 15               | 15        |           |
| GLE780/2.5X-AL  | 161   | 240 | 6         | SSH12.0x60 | 25    | CNA*      | 36.2                                     | 36.2      | 36.2             | 36.2      | 9.3              | 9.3       | 15               | 15        |           |
| GLE840/2.5X-AL  | 161   | 240 | 6         | SSH12.0x60 | 28    | CNA*      | 36.4                                     | 36.4      | 36.4             | 36.4      | 8.4              | 8.4       | 15               | 15        |           |
| GLE900/2.5X-AL  | 161   | 240 | 6         | SSH12.0x60 | 31    | CNA*      | 36.7                                     | 36.7      | 36.7             | 36.7      | 8.5              | 8.5       | 15               | 15        |           |
| GLE960/2.5X-AL  | 161   | 240 | 6         | SSH12.0x60 | 34    | CNA*      | 36.8                                     | 36.8      | 36.8             | 36.8      | 7.9              | 7.9       | 15               | 15        |           |
| GLE1020/2.5X-AL | 161   | 240 | 8         | SSH12.0x60 | 37    | CNA*      | 48.9                                     | 48.9      | 48.9             | 48.9      | 9.8              | 9.8       | 20               | 20        |           |

La tension transversale doit être vérifiée par l'utilisateur et car elle peut être prépondérante. Ces valeurs sont valides si les distances minimum de SSH ci-dessous sont respectées:

| Vis     | Distance min de rive chargée a2.t | Distance min de rive non chargée a2.c |
|---------|-----------------------------------|---------------------------------------|
| SSH12.0 | 80                                | 40                                    |

Pour des distances plus faibles, se référer à l'ETA-06/0270 et l'EN1995.

L'épaisseur minimale du bois porteur est de 73 mm pour l'utilisation des SSH Ø12x60.

## MISE EN ŒUVRE

## Fixations

**Sur porté :**

- Pointes annelées CNA Ø4.0 x 50 mm,
- Pointes annelées CNA Ø4.0 x 35 mm pour les épaisseurs inférieures à 64 mm,
- Vis CSA Ø5.0 x 40 mm,
- Vis CSA Ø5.0 x 35 mm pour les épaisseurs inférieures à 60 mm.

**Sur porteur :****Support bois :**

- Pointes annelées CNA Ø4.0 x 50 mm,
- Pointes annelées CNA Ø4.0 x 35 mm pour les épaisseurs inférieures à 64 mm,
- Vis CSA Ø5.0 x 40 mm,
- Vis CSA Ø5.0 x 35 mm pour les épaisseurs inférieures à 60 mm.
- SSH Ø 12.0 x 60 - 80 mm

**Support en acier :**

- Boulons Ø12 mm (le diamètre du boulon ne peut être inférieur de plus de 2 mm à celui du perçage).

**Support béton :**

- Cheville mécanique : goujon WA M12-104/5,
- Ancrage chimique : résine AT-HP + Tige filetée LMAS M12-150/35.

**Support maçonnerie creuse :**

- Ancrage chimique : résine AT-HP ou POLY-GP + LMAS M12-150/35 + tamis SH 20x130.

## Installation

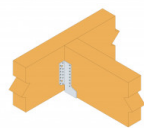
**Sur Bois :**

1. Tracer l'emplacement de la poutre portée sur le porteur.
2. Présenter le sabot et préfixer les ailes de chaque côté.
3. Ajuster le sabot par rapport aux tracés : le sabot doit être légèrement plus ouvert en haut que en bas pour faciliter l'installation de la poutre portée.
4. Finaliser la fixation sur chaque aile.
5. Présenter la poutre portée dans le sabot et la fixer en clouage partiel ou total.

**Sur Béton :**

1. Méthode 1 : Tracer l'emplacement des perçages en appliquant le sabot sur la poutre.
2. Méthode 2 : Tracer l'emplacement de la poutre sur le support, présenter le sabot et repérer les centres des perçages.
3. Percer le support avec un forêt adapté.
4. Présenter le sabot et fixer le sur le support avec des goujons d'ancrages.
5. Présenter la poutre portée dans le sabot avant de la fixer.





## NOTES TECHNIQUES